

Advanced Research Methods in Psychology PSYC 118

Fall 2025 Sections 86, 87, 88, 89, 90, 91 Fully Online 3 Unit(s) 08/20/2025 to 12/08/2025
Modified 08/21/2025

Course Information

Lecture

Tuesday, Thursday, 5:30 PM to 6:20 PM
Online; Zoom

Lab (Section 87)

Tuesday, 6:30 PM to 8:30 PM
Online; Zoom : (same link as lecture)

Lab (Section 88)

Thursday, 6:30 PM to 8:30 PM
Online; Zoom : (same link as lecture)

Course Description and Requisites

Descriptive, correlational, quasi-experimental, and experimental approaches: design, methodology, and analysis. Experience designing, conducting, analyzing, and presenting (verbal and written) research findings. Topics include: hypothesis testing, validity, reliability, scales of measurement, questionnaire development, power, statistical significance, and effect size.

Prerequisite: Lower division GE complete; STAT 95, PSYC 18, PSYC 100W with a "C" or better (or departmental approval), Upper division standing, Psychology or Behavioral Science majors only.

Letter Graded

Classroom Protocols

Classroom Protocol

Students are expected to maintain a level of professional and courteous behavior at all times, including treating other students with respect (interruptions, distractions, unnecessary comments). Students not abiding by these policies will be asked to leave the class.

Online synchronous instruction works best when everyone is engaged. This includes keeping your camera on, your microphone muted (unless speaking), utilizing reactions/chat effectively. If you are going to be distracted (at work, driving, stepping away from your computer) there is no point in coming to class.

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester's catalog, <https://catalog.sjsu.edu/>, policy section. The new Add/Late Drop Policy, S22-6, will be implementing a new combined Add/Drop deadline of September 15 this fall. Find additional information here; Undergraduate Late Drop and Semester Withdrawal.

Information about the latest changes and new is available at the Advising Hub at <https://www.sjsu.edu/advising/>

Attendance

Attendance is not going to be taken (with the exception of the first two weeks of the course). **Attendance is strongly encouraged, and the students that earn the highest marks are the ones that attend regularly.**

Use of Generative AI in This Course

The use of generative AI tools is only permitted within the parameters set by the instructor.

In alignment with the SJSU Student Conduct Code students must present work that is authentically their own. In this course, the use of generative AI tools is only permitted within the parameters provided by the instructor, specific to each assignment, with appropriate attribution. As this policy may be different from other course AI policies, please ask your instructor to clarify any questions you may have.

Program Information

Program learning outcomes (PLOs) are skills and knowledge that students will have achieved upon completion of the Psychology BA degree. Each course in our curriculum contributes to one or more of these PLOs. The PLOs for the Psychology BA degree are:

1. Knowledge Base of Psychology. Students will be able to demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
2. Research Methods in Psychology. Students will be able to design, implement, and communicate basic research methods in psychology, including research design, data analysis, and interpretations.

3. Critical Thinking Skills. Students will be able to use critical and creative thinking, skeptical inquiry, and a scientific approach to address issues related to behavior and mental processes.
 4. Applications of Psychology. Students will be able to apply psychological principles to individual, interpersonal, group, and societal issues.
- Values in Psychology. Students will value empirical evidence, tolerate ambiguity, act ethically, and recognize their role and responsibility as a member of society.

Course Learning Outcomes (CLOs)

CLO1 - Understand the scientific method and how it is applied specifically to test hypothesis and answer questions in psychology

CLO2 - Understand how to do a literature search in order to provide the background for a research project

CLO 3 - Comprehend research articles in psychological research and critically evaluate them

CLO 4 - Be able to design a study in psychology in order to test a specific hypothesis

CLO 5 - Understand the ethical ramifications of research in psychology and when/where they apply

CLO 6 - Use statistics in order to analyze a dataset, specific to the a priori hypotheses set up by the investigator

CLO 7 - Understand how information is disseminated in psychological research, through presentations and research papers, and be able to write your own APA-style paper

Course Materials

Methods in Behavioral Research

Author: Cozby PC, Bates S

Publisher: McGraw-Hill

Edition: 15th

ISBN: ISBN10: 1264558341 / ISBN13: 9781264558346

Course Requirements and Assignments

Lecture Exams

There will be four exams evenly spaced throughout the semester on the lecture material. Each exam will be a series of short-answer questions that need to be answered based on the lecture material. All exams will be open note and open book, but MUST be completed during the synchronous period which they are held. A final exam will be given during exam week that is cumulative, however you have a drop exam which can mitigate this. Each exam is worth 40 points (4x40 = 160 points total)

Reflection Questions

At the beginning of every lab session, students will be presented a "Reflection Question" to comment on before the lab starts. This will be posted and submitted on Canvas. Each Reflection Question is worth 2 points a piece, and 12 need to be completed for full credit ($2 \times 12 = 24$ points)

Specific Aims

Group Project Early in the semester, as your group is putting together their lab project, you will be required to submit an idea for your research project, taking the form of a "Specific Aims" page that you would normally find on a grant. This spec aims page is worth 20 points ($1 \times 20 = 20$ points)

Research Participation

As part of conducting our research we will also act as participants in others research projects. You'll be required to complete four of these studies in order to receive full credit ($4 \times 4 = 16$ points)

Final Research Talk

Group Project In the last week of classes, you will present with your group a talk on the research project that you have completed. This talk will be in the form of a Powerpoint/Google Slide presentation and will be structured very similar to a scientific paper. This talk will be worth 80 points ($1 \times 80 = 80$ points)

✓ Grading Information

Breakdown

Assignments and Grading Policy

Although the modality of this Spring 2025 course is online synchronous, courses at SJSU are designed in such a way that the same amount of time will be spent in a remote fashion as they normally would be in-person (roughly three hours a week per unit). More details about student workload can be found in University Policy S12-3 at <http://www.sjsu.edu/senate/docs/S12-3.pdf>.

All assignments including recordings, grades, powerpoints will be posted on Canvas and updated throughout the semester. All material (including scheduling) can change at the instructor's discretion.

Although Extra Credit is not formally assigned in this course, participation and engagement with the instructor and other students is an opportunity to earn extra points. Let's try to engage!

Lecture periods will consist of in-class activities, demonstrations, films. All lectures will be recorded and uploaded as youtube links following the class session. While attendance is not mandatory it is strongly encouraged that you attend all classes to the best of your abilities.

During lab we will be working as groups to build a research project during the semester from start to finish. As you are working in a group it is imperative that you stay in touch with your group members and keep up with this material. The instructor reserves the rights to reassign groups at their discretion.

Group projects will be done in collaboration with other members. Please make sure you stay in touch with your group members throughout the semester, and do your due diligence when it comes to responding to all communications in a timely manner. All lab assignments are designed to help you with your research project, and missing these will make it difficult for your group to successfully complete the research project this semester.

If you miss a class, you are responsible for the information from that class. All class announcements will be made by e-mail as well as during the lectures in class.

If you have trouble accessing technology needed for online synchronous instruction, please contact the Student Computing Center in the SJSU library.

If you know that you are unable to consistently attend this class, do NOT take this class.

Extra Credit Policies

There will be several opportunities throughout the semester for extra credit focused on extended student engagement with other members of the class. These opportunities can earn the student up to 3 extra points per engagement. Opportunities include :

- 1) Participating in research studies (beyond the four required for credit in this class)
- 2) Thoughtful questions posed during the research presentations at the end of the semester.

Further opportunities will be announced in class and added to this list as needed.

Late Work Policies

All assignments will need to be submitted to Canvas by the deadline provided. In the case of late work submitted past this deadline, a 50% penalty will apply unless otherwise excused by the instructor. In the case of group work, this penalty will apply to all members of the group unless deemed otherwise by the instructor.

Criteria

Type	Weight	Topic	Notes
Exams	40 points	Lecture Material	Individual
Reflection Questions (x12)	2 points	Completed at the beginning of every lab session	Individual
Specific Aims (x1)	20 points	Your idea for your research project	Group

Type	Weight	Topic	Notes
Research Participation (x4)	4 points	Participating in other group's research projects	Individual
Research Presentation (x1)	80 points	Group presentation to the class on the results of your research project	Group

University Policies

Per [University Policy S16-9 \(PDF\)](http://www.sjsu.edu/senate/docs/S16-9.pdf) (<http://www.sjsu.edu/senate/docs/S16-9.pdf>), relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on the [Syllabus Information](https://www.sjsu.edu/curriculum/courses/syllabus-info.php) (<https://www.sjsu.edu/curriculum/courses/syllabus-info.php>) web page. Make sure to visit this page to review and be aware of these university policies and resources.

Course Schedule

When	Topic	Notes
Thursday 08/21/2025 5:30 PM - 6:20 PM	Class Overview	
Tuesday 08/26/2025 5:30 PM - 6:20 PM	Chapter 1	Using Science to Study Human Behavior
Thursday 08/28/2025 5:30 PM - 6:20 PM	Chapter 2	Getting Started / Literature Search
Tuesday 09/02/2025 5:30 PM - 6:20 PM	Chapter 2	Getting Started / Literature Search
Thursday 09/04/2025 5:30 PM - 6:20 PM	Chapter 3	Ethics in Behavioral Research
Tuesday 09/09/2025 5:30 PM - 6:20 PM	Chapter 3	Ethics in Behavioral Research

When	Topic	Notes
Thursday 09/11/2025 5:30 PM - 6:20 PM	Chapter 4	Fundamental Research Issues
Tuesday 09/16/2025 5:30 PM - 6:20 PM	Chapter 4	Fundamental Research Issues
Thursday 09/18/2025 5:30 PM - 6:20 PM		EXAM ONE (Chapters 1 - 4)
Tuesday 09/23/2025 5:30 PM - 6:20 PM	Chapter 5	Measurement Concepts
Thursday 09/25/2025 5:30 PM - 6:20 PM	Chapter 5	Measurement Concepts
Tuesday 09/30/2025 5:30 PM - 6:20 PM	Chapter 6	Observational Methods
Thursday 10/02/2025 5:30 PM - 6:20 PM	Chapter 7	Survey Research
Tuesday 10/07/2025 5:30 PM - 6:20 PM	Chapter 7	Survey Research
Thursday 10/09/2025 5:30 PM - 6:20 PM		EXAM TWO (Chapters 5-7)
Tuesday 10/14/2025 5:30 PM - 6:20 PM	Chapter 8	Experimental Design Specific Aims DUE
Thursday 10/16/2025 5:30 PM - 6:20 PM	Chapter 8	Experimental Design

When	Topic	Notes
Tuesday 10/21/2025 5:30 PM - 6:20 PM	Chapter 9	Conducting Experiments
Thursday 10/23/2025 5:30 PM - 6:20 PM	Chapter 9	Conducting Experiments
Tuesday 10/28/2025 5:30 PM - 6:20 PM	Chapter 10	Complex Experimental Design
Thursday 10/30/2025 5:30 PM - 6:20 PM	Chapter 10	Complex Experimental Designs
Tuesday 11/04/2025 5:30 PM - 6:20 PM		EXAM THREE (Chapters 8-10)
Thursday 11/06/2025 5:30 PM - 6:20 PM	Chapter 11	Other Experimental Designs
Tuesday 11/11/2025 5:30 PM - 6:20 PM	Chapter 11	Other Experimental Designs
Thursday 11/13/2025 5:30 PM - 6:20 PM	Chapter 12	Descriptive + Relational Statistics
Tuesday 11/18/2025 5:30 PM - 6:20 PM	Chapter 12	Descriptive + Relational Statistics
Thursday 11/20/2025 5:30 PM - 6:20 PM	Chapter 13	Inferential Statistics
Tuesday 11/25/2025 5:30 PM - 6:20 PM	Chapter 13	Inferential Statistics

When	Topic	Notes
Thursday 11/27/2025 5:30 PM - 6:20 PM		NO CLASS : Thanksgiving
Tuesday 12/02/2025 5:30 PM - 6:20 PM	Chapter 14	Generalization
Thursday 12/04/2025 5:30 PM - 6:20 PM		EXAM FOUR (Chapters 11 - 14) RESEARCH PROJECT PROPOSAL WEEK